

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Name of Applicant and Assignee: SUN MICROSYSTEMS, INC.  
Address of Applicant and Assignee: 4150 Network Circle  
Santa Clara, CA 95054

Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

**REVOCATION AND SUBSTITUTION  
OF POWER OF ATTORNEY UNDER 37 C.F.R. §1.36**

Dear Sir:

Pursuant to 37 C.F.R. §1.36, Sun Microsystems, Inc., the applicant and assignee of the patent applications listed on the attached APPENDIX A, revokes all previous powers of attorney in the patent applications listed on the attached APPENDIX A, hereby appoints the following attorneys and/or agents assigned to the Customer Number listed below to prosecute the patent applications listed on the attached APPENDIX A, and to transact all business in the U.S. Patent and Trademark Office connected therewith:

Customer Number 32615

Please direct all correspondence and telephone calls concerning the patent applications listed on the attached APPENDIX A to:

Robert P. Lord  
OSHA • LIANG LLP  
909 Fannin Street, Suite 3500  
Houston, Texas 77010  
Telephone No.: (713) 228-8600  
Facsimile No.: (713) 228-8778

Further, please change the attorney/docket number corresponding to the patent applications listed in APPENDIX A from the attorney/docket number on file to that indicated on APPENDIX A.

The undersigned (whose title is supplied below) is empowered to sign this certificate on behalf of the above-identified applicant.

The undersigned hereby declares that all statements made herein of the undersigned's own knowledge are true, that all statements made on information and belief are believed to be true, and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the patent applications listed on the attached APPENDIX A or any patents issuing thereon.

Signature:

John Ketchum  
John Ketchum

Dated:

1/26/09

Name:

Title:

Assistant General Counsel

Sun Microsystems, Inc.

## APPENDIX A

1. **Patent Application/Serial No.:** 11/277,762  
**Title:** MICROPROCESSOR ARCHITECTURE  
WITH RECONFIGURABLE  
FUNCTION UNITS  
**Filed:** 3/29/2006  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 021731/0700  
**Reference No:** 33227/220001; SUN080708-US-NP
2. **Patent Application/Serial No.:** 11/351,058  
**Patent No.:** 7,412,570  
**Title:** SMALL AND POWER-EFFICIENT  
CACHE THAT CAN PROVIDE DATA  
FOR BACKGROUND DMA DEVICES  
WHILE THE PROCESSOR IS IN A  
LOW-POWER STATE  
**Filed:** 2/9/2006  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 017518/0156 (Inventors to Montalvo)  
021171/0578 (Montalvo to Sun)  
**Reference No:** 33227/221001; SUN080674

3. **Patent Application/Serial No.:** 11/559,069
- Title:** SMALL AND POWER-EFFICIENT  
CACHE THAT CAN PROVIDE DATA  
FOR BACKGROUND DMA DEVICES  
WHILE THE PROCESSOR IS IN A  
LOW-POWER STATE
- Filed:** 11/13/2006
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 020957/0434
- Reference No:** 33227/221002; SUN080674-US-CNT-1
4. **Patent Application/Serial No.:** 60/731,968
- Title:** ENHANCED RF DECODER SAVES  
POWER DURING UNNECESSARY  
READS
- Filed:** 10/31/2005
- Applicant:** Sun Microsystems, Inc.
- Reference No:** 33227/223000; SUN080662-US-PSP
5. **Patent Application/Serial No.:** 11/306,000
- Title:** SOFTWARE HINT TO SPECIFY THE  
PREFERRED BRANCH PREDICTION  
TO USE FOR A BRANCH  
INSTRUCTION
- Filed:** 12/16/2005
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 017518/0137
- Reference No:** 33227/224001; SUN080653

6. **Patent Application/Serial No.:** 11/279,880
- Title:** IMPROVED PREFETCH HARDWARE  
EFFICIENCY VIA PREFETCH HINT  
INSTRUCTIONS
- Filed:** 4/15/2006
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 018161/0754
- Reference No:** 33227/226001; SUN080665
7. **Patent Application/Serial No.:** 11/277,765
- Title:** THREAD MIGRATION AND  
RECONFIGURATION OF A MULTI-  
CORE PROCESSOR
- Filed:** 3/29/2006
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 021731/0700
- Reference No:** 33227/227001; SUN080651-US-NP-5
8. **Patent Application/Serial No.:** 11/645,901
- Title:** PREDICTION OF DATA VALUES  
READ FROM MEMORY BY A  
MICROPROCESSOR USING A  
DYNAMIC CONFIDENCE  
THRESHOLD
- Filed:** 12/26/2006
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 020957/0434
- Reference No:** 33227/229001; SUN080843

9. **Patent Application/Serial No.:** 11/645,917
- Title:** LOW-POWER PREDICTION OF DATA VALUES READ FROM MEMORY BY A MICROPROCESSOR
- Filed:** 12/26/2006
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 020957/0434
- Reference No:** 33227/230001; SUN080824
10. **Patent Application/Serial No.:** 11/645,935
- Title:** PREDICTION OF DATA VALUES READ FROM MEMORY BY A MICROPROCESSOR USING SELECTIVE TABLE ENTRY REPLACEMENT
- Filed:** 12/26/2006
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 020957/0434
- Reference No:** 33227/231001; SUN080823
11. **Patent Application/Serial No.:** 11/561,287
- Title:** EXECUTING FUNCTIONS DETERMINED VIA A COLLECTION OF OPERATIONS FROM TRANSLATED INSTRUCTIONS
- Filed:** 11/17/2006
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 021731/0700
- Reference No:** 33227/235001; SUN080680

12. **Patent Application/Serial No.:** 11/646,008
- Title:** PREDICTION OF DATA VALUES  
READ FROM MEMORY BY A  
MICROPROCESSOR USING THE  
STORAGE DESTINATION OF A  
LOAD OPERATION
- Filed:** 12/26/2006
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 020957/0434
- Reference No:** 33227/236001; SUN080825
13. **Patent Application/Serial No.:** 11/561,281
- Title:** FUSING REGISTER OPERATIONS OF  
A TARGET ARCHITECTURE  
OPERATION SET
- Filed:** 11/17/2006
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 021731/0700
- Reference No:** 33227/237001; SUN080680
14. **Patent Application/Serial No.:** 60/707,070
- Title:** ADAPTIVE COMPUTING ENSEMBLE  
MICROPROCESSOR ARCHITECTURE
- Filed:** 8/10/2005
- Applicant:** Sun Microsystems, Inc.
- Reference No:** 33227/254001; SUN080651

15. **Patent Application/Serial No.:** 60/751,398  
**Title:** ADAPTIVE COMPUTING ENSEMBLE  
MICROPROCESSOR ARCHITECTURE  
**Filed:** 12/17/2005  
**Applicant:** Sun Microsystems, Inc.  
**Reference No:** 33227/255001; SUN080707
16. **Patent Application/Serial No.:** 60/758,485  
**Title:** MICROPROCESSOR ARCHITECTURE  
WITH RECONFIGURABLE  
FUNCTION UNITS  
**Filed:** 1/10/2006  
**Applicant:** Sun Microsystems, Inc.  
**Reference No:** 33227/256001; SUN080690
17. **Patent Application/Serial No.:** 60/759,484  
**Title:** ADAPTIVE COMPUTING ENSEMBLE  
MICROPROCESSOR ARCHITECTURE  
**Filed:** 1/17/2006  
**Applicant:** Sun Microsystems, Inc.  
**Reference No:** 33227/257001; SUN080708



- 18. Patent Application/Serial No.:** 60/777,015  
**Title:** ADAPTIVE COMPUTING ENSEMBLE MICROPROCESSOR ARCHITECTURE  
**Filed:** 2/25/2006  
**Applicant:** Sun Microsystems, Inc.  
**Reference No:** 33227/258001; SUN080709
- 19. Patent Application/Serial No.:** 11/277,761  
**Title:** ADAPTIVE COMPUTING ENSEMBLE MICROPROCESSOR ARCHITECTURE  
**Filed:** 3/29/2006  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 021731/0700  
**Reference No:** 33227/259001; SUN080707
- 20. Patent Application/Serial No.:** 11/781,726  
**Title:** VIRTUAL CORE MANAGEMENT  
**Filed:** 7/23/2007  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 020957/0434  
**Reference No:** 33227/259002; SUN080835-US-CIP1

21. **Patent Application/Serial No.:** 60/832,823
- Title:** MANAGING MULTIPLE PHYSICAL  
CORE PROCESSORS TO BEHAVE AS  
ONE VIRTUAL CORE PROCESSOR
- Filed:** 7/23/2006
- Applicant:** Sun Microsystems, Inc.
- Reference No:** 33227/259003; SUN080835
22. **Patent Application/Serial No.:** 11/277,763
- Title:** STATICALLY CONFIGURED  
MICROPROCESSOR ARCHITECTURE
- Filed:** 3/29/2006
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 021731/0700
- Reference No:** 33227/260001; SUN080709-US-NP
23. **Patent Application/Serial No.:** 11/277,764
- Title:** CONFIGURABLE MULTI-CORE  
PROCESSOR IMPLEMENTING  
VIRTUAL PROCESSORS
- Filed:** 3/29/2006
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 021731/0700
- Reference No:** 33227/261001; SUN080651-US-NP-4

24. **Patent Application/Serial No.:** 60/730,550  
**Title:** CHECKPOINTING STATUS FLAGS  
FOR ATOMIC TRACES  
**Filed:** 10/26/2005  
**Applicant:** Sun Microsystems, Inc.  
**Reference No:** 33227/262001; SUN080660-US-PSP
25. **Patent Application/Serial No.:** 60/730,810  
**Title:** ALLOCATION AND DEALLOCATION  
OF SHADOW REGISTERS USED BY  
ATOMIC TRACES  
**Filed:** 10/27/2005  
**Applicant:** Sun Microsystems, Inc.  
**Reference No:** 33227/263001; SUN080661-US-PSP
26. **Patent Application/Serial No.:** 60/731,962  
**Title:** DETERMINING THE HIGHEST  
PRIORITY ABORT TRIGGER IN AN  
ATOMIC TRACE  
**Filed:** 10/31/2005  
**Applicant:** Sun Microsystems, Inc.  
**Reference No:** 33227/264001; SUN080691-US-PSP

27. **Patent Application/Serial No.:** 60/732,438
- Title:** ZERO-CYCLE EXECUTION OF  
CLEAR OPERATION AND  
AUTOMATIC REGISTER FREE
- Filed:** 11/1/2005
- Applicant:** Sun Microsystems, Inc.
- Reference No:** 33227/265001; SUN080669-US-PSP
28. **Patent Application/Serial No.:** 60/832,822
- Title:** MICROPROCESSOR WITH  
COHERENT CACHES FOR BASIC  
BLOCKS AND TRACES
- Filed:** 7/23/2006
- Applicant:** Sun Microsystems, Inc.
- Reference No:** 33227/268001; SUN080753-US-PSP
29. **Patent Application/Serial No.:** 60/863,125
- Title:** METHOD FOR EARLY  
DEALLOCATION OF PHYSICAL  
REGISTERS WHEN SHADOW  
REGISTERS ARE USED
- Filed:** 10/26/2006
- Applicant:** Sun Microsystems, Inc.
- Reference No:** 33227/266001; SUN080683-US-PSP

- 30. Patent Application/Serial No.:** 60/832,848
- Title:** MICROPROCESSOR WITH CACHES FOR INSTRUCTIONS, BASIC BLOCKS, AND TRACES
- Filed:** 7/23/2006
- Applicant:** Sun Microsystems, Inc.
- Reference No:** 33227/267001; SUN080752-US-PSP
- 31. Patent Application/Serial No.:** 60/862,609
- Title:** EXCEPTION HANDLING FOR ATOMIC TRACES
- Filed:** 10/24/2006
- Applicant:** Sun Microsystems, Inc.
- Reference No:** 33227/269001; SUN080693-US-PSP
- 32. Patent Application/Serial No.:** 60/866,205
- Title:** PROCESSOR WITH OPTIMIZED OPERATION SEQUENCES FOR BASIC BLOCK AND MULTI-BLOCK TRACE CACHES
- Filed:** 11/16/2006
- Applicant:** Sun Microsystems, Inc.
- Reference No:** 33227/270001; SUN080694-US-PSP

33. **Patent Application/Serial No.:** 60/866,203  
**Title:** PROCESSOR WITH BASIC BLOCK  
AND MULTI-BLOCK TRACE  
CACHES  
**Filed:** 11/16/2006  
**Applicant:** Sun Microsystems, Inc.  
**Reference No:** 33227/271001; SUN080695-US-PSP
34. **Patent Application/Serial No.:** 11/553,453  
**Title:** CHECKPOINTING FLAGS DURING  
ATOMIC TRACE RENAMING  
**Filed:** 10/26/2006  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 018887/0247  
**Reference No:** 33227/272001; SUN080660-US-NP-1
35. **Patent Application/Serial No.:** 11/553,458  
**Title:** FLAG RESTORATION FROM  
CHECKPOINTS FOR ABORTS OF  
ATOMIC TRACES  
**Filed:** 10/26/2006  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 018887/0247  
**Reference No:** 33227/273001; SUN080660-US-NP-3

36. **Patent Application/Serial No.:** 11/553,455  
**Title:** CHECKPOINTING FLAGS ON-DEMAND FOR ATOMIC TRACES  
**Filed:** 10/26/2006  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 021731/0700  
**Reference No:** 33227/274001; SUN080660-US-NP-2
37. **Patent Application/Serial No.:** 60/736,632  
**Title:** POWER CONSERVATION VIA DRAM ACCESS REDUCTION  
**Filed:** 11/15/2005  
**Applicant:** Sun Microsystems, Inc.  
**Reference No:** 33227/275001; SUN080670-US-PSP
38. **Patent Application/Serial No.:** 60/736,736  
**Title:** SMALL AND POWER-EFFICIENT CACHE THAT CAN PROVIDE DATA FOR BACKGROUND DMA DEVICES WHILE THE PROCESSOR IS IN A LOW-POWER STATE  
**Filed:** 11/15/2005  
**Applicant:** Sun Microsystems, Inc.  
**Reference No:** 33227/276001; SUN080674-US-PSP

- 39. Patent Application/Serial No.:** 60/761,220
- Title:** POWER CONSERVATION VIA DRAM ACCESS REDUCTION
- Filed:** 1/23/2006
- Applicant:** Sun Microsystems, Inc.
- Reference No:** 33227/277001; SUN080671-US-PSP
- 
- 40. Patent Application/Serial No.:** 60/761,925
- Title:** SMALL AND POWER-EFFICIENT CACHE THAT CAN PROVIDE DATA FOR BACKGROUND DMA DEVICES WHILE THE PROCESSOR IS IN A LOW-POWER STATE
- Filed:** 1/25/2006
- Applicant:** Sun Microsystems, Inc.
- Reference No:** 33227/278001; SUN080679-US-PSP
- 
- 41. Patent Application/Serial No.:** 11/351,070
- Title:** POWER CONSERVATION VIA DRAM ACCESS REDUCTION
- Filed:** 2/9/2006
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 021171/0578
- Reference No:** 33227/279001; SUN080670-US-NP



42. **Patent Application/Serial No.:** 11/559,133  
**Title:** POWER CONSERVATION VIA DRAM ACCESS REDUCTION  
**Filed:** 11/13/2006  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 020957/0434  
**Reference No:** 33227/279002; SUN080670-US-CNT-1
43. **Patent Application/Serial No.:** 11/559,192  
**Title:** POWER CONSERVATION VIA DRAM ACCESS  
**Filed:** 11/13/2006  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 019355/0223  
**Reference No:** 33227/279003; SUN080670-US-CIP
44. **Patent Application/Serial No.:** 12/030,846  
**Title:** TRACE BASED DEALLOCATION OF ENTRIES IN A VERSIONING CACHE CIRCUIT  
**Filed:** 2/13/2008  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 020957/0434  
**Reference No:** 33227/282002; SUN080742-US-CIP-8

- 45. Patent Application/Serial No.:** 12/030,851  
**Title:** MEMORY ORDERING QUEUE /  
VERSIONING CACHE CIRCUIT  
**Filed:** 2/13/2008  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 020957/0434  
**Reference No:** 33227/282003; SUN080742-US-CIP-7
- 46. Patent Application/Serial No.:** 12/030,852  
**Title:** TRACE BASED ROLLBACK OF A  
SPECULATIVELY UPDATED CACHE  
**Filed:** 2/13/2008  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 020957/0434  
**Reference No:** 33227/282004; SUN080742-US-CIP-9
- 47. Patent Application/Serial No.:** 12/030,854  
**Title:** MEMORY RECONCILIATION BLOCK  
**Filed:** 2/13/2008  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 020957/0434  
**Reference No:** 33227/282005; SUN080742-US-CIP-6

- 48. Patent Application/Serial No.:** 12/030,857
- Title:** MEMORY ORDERING QUEUE  
TIGHTLY COUPLED WITH A  
VERSIONING CACHE CIRCUIT
- Filed:** 2/13/2008
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 020957/0434
- Reference No:** 33227/282006; SUN080742-US-CIP-10
- 
- 49. Patent Application/Serial No.:** 60/721,385
- Title:** EFFICIENT TRACE CACHE  
MANAGEMENT DURING SELF-  
MODIFYING CODE PROCESSING
- Filed:** 9/28/2005
- Applicant:** Sun Microsystems, Inc.
- Reference No:** 33227/283001; SUN080652-US-PSP
- 
- 50. Patent Application/Serial No.:** 11/535,971
- Title:** EFFICIENT TRACE CACHE  
MANAGEMENT DURING SELF-  
MODIFYING CODE PROCESSING
- Filed:** 9/27/2006
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 021731/0700
- Reference No:** 33227/283002; SUN080652-US-NP-1

51. **Patent Application/Serial No.:** 11/535,972
- Title:** SELECTIVE TRACE CACHE  
INVALIDATION FOR SELF-  
MODIFYING CODE VIA MEMORY  
AGING
- Filed:** 9/27/2006
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 021731/0700
- Reference No:** 33227/283003; SUN080652-US-NP-2
52. **Patent Application/Serial No.:** 11/535,977
- Title:** TRACE CACHE FOR EFFICIENT  
SELF-MODIFYING CODE  
PROCESSING
- Filed:** 9/27/2006
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 021731/0700
- Reference No:** 33227/283004; SUN080652-US-NP-3
53. **Patent Application/Serial No.:** 11/781,949
- Title:** METHOD AND SYSTEM FOR  
PROMOTING TRACES IN AN  
INSTRUCTION PROCESSING  
CIRCUIT
- Filed:** 7/24/2007
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 021731/0700
- Reference No:** 33227/283005; SUN080752

- 54. Patent Application/Serial No.:** 11/782,140
- Title:** METHOD AND SYSTEM FOR PROMOTING TRACES IN AN INSTRUCTION PROCESSING CIRCUIT
- Filed:** 7/24/2007
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 021731/0700
- Reference No:** 33227/283006; SUN080752-US-CIP-2
- 55. Patent Application/Serial No.:** 11/782,163
- Title:** MICROPROCESSOR WITH COHERENT CACHES FOR BASIC BLOCKS AND TRACES
- Filed:** 7/24/2007
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 020957/0434
- Reference No:** 33227/283007; SUN080753-US-CIP-1
- 56. Patent Application/Serial No.:** 11/781,950
- Title:** TRACE UNIT WITH A DECODER, A BASIC-BLOCK CACHE, AND A MULTI-BLOCK CACHE
- Filed:** 7/24/2007
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 020957/0434
- Reference No:** 33227/283008; SUN080744-US-CIP-1

57. **Patent Application/Serial No.:** 11/880,862
- Title:** TRACE UNIT WITH A DECODER, A BASIC-BLOCK CACHE, A MULTI-BLOCK CACHE, AND SEQUENCER
- Filed:** 7/23/2007
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 020957/0434
- Reference No:** 33227/283009; SUN080745-US-CIP-2
58. **Patent Application/Serial No.:** 11/781,937
- Title:** TRACE UNIT WITH A DECODER, A BASIC-BLOCK BUILDER, AND A MULTI-BLOCK BUILDER
- Filed:** 7/23/2007
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 020957/0434
- Reference No:** 33227/285001; SUN080742-US-CIP-0
59. **Patent Application/Serial No.:** 11/923,638
- Title:** GRACEFUL DEGRADATION IN A TRACE-BASED PROCESSOR
- Filed:** 10/24/2007
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 020957/0434
- Reference No:** 33227/285002; SUN080742-US-CIP-1

60. **Patent Application/Serial No.:** 11/923,640  
**Title:** ABORT PRIORITIZATION IN A TRACE-BASED PROCESSOR  
**Filed:** 10/24/2007  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 020957/0434  
**Reference No:** 33227/285003; SUN080742-US-CIP-2
61. **Patent Application/Serial No.:** 11/941,900  
**Title:** FLAG OPTIMIZATION OF A TRACE  
**Filed:** 11/16/2007  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 020957/0434  
**Reference No:** 33227/285004; SUN080742-US-CIP-3
62. **Patent Application/Serial No.:** 11/941,908  
**Title:** EMIT VECTOR OPTIMIZATION OF A TRACE  
**Filed:** 11/16/2007  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 020957/0434  
**Reference No:** 33227/285005; SUN080742-US-CIP-4

- 63. Patent Application/Serial No.:** 11/941,912  
**Title:** SYMBOLIC RENAMING  
OPTIMIZATION OF A TRACE  
**Filed:** 11/16/2007  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 020957/0434  
**Reference No:** 33227/285006; SUN080742-US-CIP-5
- 64. Patent Application/Serial No.:** 60/738,225  
**Title:** FUSING OR REGISTER  
OPERATIONS, MERGING, STATUS  
FLAG UPDATES, BRANCHES  
**Filed:** 11/18/2005  
**Applicant:** Sun Microsystems, Inc.  
**Reference No:** 33227/286001; SUN080680-US-PSP
- 65. Patent Application/Serial No.:** 60/744,592  
**Title:** IMPROVED PREFETCH HARDWARE  
EFFICIENCY VIA PREFETCH HINT  
INSTRUCTIONS  
**Filed:** 4/10/2006  
**Applicant:** Sun Microsystems, Inc.  
**Reference No:** 33227/287001; SUN080673-US-PSP



- 66. Patent Application/Serial No.:** 60/743,560
- Title:** IMPROVED PREFETCH HARDWARE EFFICIENCY VIA PREFETCH HINT INSTRUCTIONS
- Filed:** 3/20/2006
- Applicant:** Sun Microsystems, Inc.
- Reference No:** 33227/288001; SUN080672-US-PSP
- 67. Patent Application/Serial No.:** 60/731,969
- Title:** INSTRUCTIONS GIVING HINTS TO THE HARDWARE PREFETCHER FOR MORE EFFICIENT PREDICTION OF PREFETCHES
- Filed:** 10/31/2005
- Applicant:** Sun Microsystems, Inc.
- Reference No:** 33227/289001; SUN080665-US-PSP
- 68. Patent Application/Serial No.:** 60/757,240
- Title:** EXTENDED RESOURCE CREDIT SCHEME TO SUPPORT DYNAMIC REASSIGNMENT OF RESOURCES AMONG DATA PRODUCERS
- Filed:** 1/9/2006
- Applicant:** Sun Microsystems, Inc.
- Reference No:** 33227/290001; SUN080682-US-PSP

- 69. Patent Application/Serial No.:** 60/731,967
- Title:** SYNCHRONIZED REGISTER  
RENAMING BY A MASTER  
PROCESSOR AND A COPROCESSOR
- Filed:** 10/31/2005
- Applicant:** Sun Microsystems, Inc.
- Reference No:** 33227/291001; SUN080668-US-PSP
- 70. Patent Application/Serial No.:** 60/749,962
- Title:** SOFTWARE HINT TO SPECIFY THE  
PREFETCH BRANCH PREDICTION  
TO USE FOR A BRANCH  
INSTRUCTION
- Filed:** 12/12/2005
- Applicant:** Sun Microsystems, Inc.
- Reference No:** 33227/292001; SUN080656-US-PSP
- 71. Patent Application/Serial No.:** 60/721,818
- Title:** SOFTWARE HINT TO SPECIFY THE  
PREFETCH BRANCH PREDICTION  
TO USE FOR A BRANCH  
INSTRUCTION
- Filed:** 9/29/2005
- Applicant:** Sun Microsystems, Inc.
- Reference No:** 33227/293001; SUN080653-US-PSP

72. **Patent Application/Serial No.:** 11/777,074
- Title:** MEMORY CELLS WITH POWER SWITCH CIRCUIT FOR IMPROVED LOW VOLTAGE OPERATION
- Filed:** 7/12/2007
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 021198/0009
- Reference No:** 33227/348001; SUN080722-US-NP
73. **Patent Application/Serial No.:** 60/746,049
- Title:** REDUCED POWER CACHE MEMORY WITH PER-SECTOR POWER CONTROL
- Filed:** 4/30/2006
- Applicant:** Sun Microsystems, Inc.
- Reference No:** 33227/298001; SUN080710-US-PSP
74. **Patent Application/Serial No.:** 11/740,901
- Title:** REDUCED-POWER MEMORY WITH PER-SECTOR POWER/GROUND CONTROL AND EARLY ADDRESS
- Filed:** 4/26/2007
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 021731/0700
- Reference No:** 33227/298002; SUN080710-US-NP

75. **Patent Application/Serial No.:** 60/747,200  
**Title:** REDUCED POWER CACHE MEMORY  
WITH PER-SECTOR POWER  
CONTROL  
**Filed:** 5/14/2006  
**Applicant:** Sun Microsystems, Inc.  
**Reference No:** 33227/299001; SUN080685-US-PSP
76. **Patent Application/Serial No.:** 60/747,818  
**Title:** RE-FETCHING CACHE MEMORY  
**Filed:** 5/22/2006  
**Applicant:** Sun Microsystems, Inc.  
**Reference No:** 33227/300001; SUN080688-US-PSP
77. **Patent Application/Serial No.:** 60/803,367  
**Title:** RE-FETCHING CACHE MEMORY  
**Filed:** 5/28/2006  
**Applicant:** Sun Microsystems, Inc.  
**Reference No:** 33227/301001; SUN080689-US-PSP
78. **Patent Application/Serial No.:** 60/804,085  
**Title:** APPLICATION-DIRECTED RANK  
COALESCING FOR MEMORY  
POWER MANAGEMENT  
**Filed:** 6/6/2006  
**Applicant:** Sun Microsystems, Inc.  
**Reference No:** 33227/302001; SUN080686-US-PSP

79. **Patent Application/Serial No.:** 60/888,011  
**Title:** MEMORY CELLS WITH POWER SWITCH FOR WRITE OPERATIONS  
**Filed:** 2/2/2007  
**Applicant:** Sun Microsystems, Inc.  
**Reference No:** 33227/306001; SUN080720-US-PSP
80. **Patent Application/Serial No.:** 11/932,699  
**Title:** MEMORY CELL WITH INTERNAL POWER SWITCH  
**Filed:** 10/31/2007  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 020957/0434  
**Reference No:** 33227/306002; SUN080720-US-NP
81. **Patent Application/Serial No.:** 11/932,738  
**Title:** METHOD OF OPERATING MEMORY CELL PROVIDING INTERNAL POWER SWITCHING  
**Filed:** 10/31/2007  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 020957/0434  
**Reference No:** 33227/306003; SUN080720-US-NP-1

- 82. Patent Application/Serial No.:** 11/764,159  
**Title:** SYMMETRICAL DIFFERENTIAL AMPLIFIER  
**Filed:** 6/15/2007  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 020957/0434  
**Reference No:** 33227/908001; SUN080742
- 83. Patent Application/Serial No.:** 11/751,949  
**Title:** RE-FETCHING CACHE MEMORY ENABLING LOW-POWER MODES  
**Filed:** 5/22/2007  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 021731/0700  
**Reference No:** 33227/279004; SUN080689-US-NP-1
- 84. Patent Application/Serial No.:** 11/751,973  
**Title:** RE-FETCHING CACHE MEMORY ENABLING ALTERNATIVE OPERATIONAL MODES  
**Filed:** 5/22/2007  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 021731/0700  
**Reference No:** 33227/279005; SUN080688-US-NP-2

- 85. Patent Application/Serial No.:** 11/751,985  
**Title:** RE-FETCHING CACHE MEMORY  
HAVING COHERENT RE-FETCHING  
**Filed:** 5/22/2007  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 021731/0700  
**Reference No:** 33227/279006; SUN080688-US-NP-3
- 86. Patent Application/Serial No.:** 12/030,855  
**Title:** VERSIONING CACHE CIRCUIT  
PARTICIPATING IN A CACHE  
HIERARCHY  
**Filed:** 2/13/2008  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 020957/0434  
**Reference No:** 33227/282007; SUN080742-US-CIP-13
- 87. Patent Application/Serial No.:** 11/555,258  
**Title:** SYNCHRONIZED REGISTER  
RENAMING IN A MULTIPROCESSOR  
**Filed:** 10/31/2006  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 012501/0661 (Inventors to Elan)  
017089/0214 (Elan to Montalvo)  
021731/0700 (Montalvo to Sun)  
**Reference No:** 33227/291002; SUN080668-US-NP-1

- 88. Patent Application/Serial No.:** 11/555,263  
**Title:** SYNCHRONIZED REGISTER  
RENAMING IN A MULTIPROCESSOR  
**Filed:** 10/31/2006  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 020957/0434  
**Reference No:** 33227/291003; SUN080668
- 89. Patent Application/Serial No.:** 60/741,724  
**Title:** MICROARCHITECTURE FOR  
COMPRESSED STORAGE OF  
OPERATIONS WITH EMBEDDED  
CONSTANTS  
**Filed:** 12/2/2005  
**Applicant:** Sun Microsystems, Inc.  
**Reference No:** 33227/294001; SUN080681-US-PSP
- 90. Patent Application/Serial No.:** 60/744,010  
**Title:** SOFTWARE-ASSISTED THREAD  
MIGRATION BETWEEN MULTIPLE  
CORES  
**Filed:** 3/30/2006  
**Applicant:** Sun Microsystems, Inc.  
**Reference No:** 33227/295001; SUN080701-US-PSP



91. **Patent Application/Serial No.:** 60/781,772  
**Title:** SOFTWARE-ASSISTED THREAD  
MIGRATION BETWEEN MULTIPLE  
CORES  
**Filed:** 3/13/2006  
**Applicant:** Sun Microsystems, Inc.  
**Reference No:** 33227/296001; SUN080684-US-PSP
92. **Patent Application/Serial No.:** 60/832,847  
**Title:** LOW POWER SRAM FOR A DUAL  
PROCESSOR SYSTEM  
**Filed:** 7/23/2006  
**Applicant:** Sun Microsystems, Inc.  
**Reference No:** 33227/297001; SUN090008-US-PSP
93. **Patent Application/Serial No.:** 60/731,785  
**Title:** MAINTAINING MEMORY  
COHERENCY WITHIN A TRACE  
CACHE  
**Filed:** 10/31/2005  
**Applicant:** Sun Microsystems, Inc.  
**Reference No:** 33227/284001; SUN080667-US-PSP
94. **Patent Application/Serial No.:** 60/889,547  
**Title:** INSTRUCTION SUB-TYPE  
TRACKING UNIT  
**Filed:** 2/13/2007  
**Applicant:** Sun Microsystems, Inc.  
**Reference No:** 33227/282001; SUN080692-US-PSP

95. **Patent Application/Serial No.:** 11/279,882
- Title:** MECHANISMS FOR SOFTWARE (OS)  
TO CONTROL THREADS BETWEEN  
MULTIPLE CORES
- Filed:** 04/15/2006
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 018161/0814
- Reference No:** 33227/296002; SUN080684-US-NP-1
96. **Patent Application/Serial No.:** 11/279,883
- Title:** OBJECTIVE-DIRECTED  
MECHANISMS FOR SOFTWARE (OS)  
TO CONTROL THREAD MIGRATION
- Filed:** 04/15/2006
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 018161/0814
- Reference No:** 33227/296003; SUN080684-US-NP-2
97. **Patent Application/Serial No.:** 11/566,206
- Patent No.:** 7,389,408
- Title:** MICROARCHITECTURE FOR  
COMPACT STORAGE OF EMBEDDED  
CONSTANTS
- Filed:** 12/01/2006
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 020925/0679
- Reference No:** 33227/294002; SUN080681-US-NP

**98. Patent Application/Serial No.:** 11/782,180

**Title:** TRACE VERIFICATION SYSTEM  
AND METHOD FOR AN  
INSTRUCTION PROCESSING  
CIRCUIT

**Filed:** 07/24/2007

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 020957/0434

**Reference No:** 33227/283014; SUN080652-US-CIP-1

**99. Patent Application/Serial No.:** 11/782,238

**Title:** METHOD AND SYSTEM FOR  
UTILIZING A COMMON STRUCTURE  
FOR TRACE VERIFICATION AND  
MAINTAINING COHERENCY IN AN  
INSTRUCTION PROCESSING  
CIRCUIT

**Filed:** 07/24/2007

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 020957/0434

**Reference No:** 33227/283015; SUN080652-US-CIP-2

**100. Patent Application/Serial No.:** 11/880,861

**Title:** TRACE UNIT WITH A TRACE  
BUILDER

**Filed:** 07/23/2007

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 020957/0434

**Reference No:** 33227/283013; SUN080652-US-CIP-3

**101. Patent Application/Serial No.:** 11/880,859  
**Title:** CONCURRENT VS LOW POWER  
BRANCH PREDICTION  
**Filed:** 07/23/2007  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 020957/0434  
**Reference No:** 33227/283011; SUN080750-US-CIP-1

**102. Patent Application/Serial No.:** 11/880,863  
**Title:** TRACE UNIT WITH AN OP PATH  
FROM A DECODER (BYPASS  
MODE) AND FROM A BASIC-  
BLOCK BUILDER  
**Filed:** 07/23/2007  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 020957/0434  
**Reference No:** 33227/283010; SUN080746-US-CIP-1

**103. Patent Application/Serial No.:** 12/030,865  
**Title:** TRACE-BASED STORE  
OPERATION BUFFER  
**Filed:** 02/13/2008  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 020957/0434  
**Reference No:** 33227/282011; SUN080742-US-CIP-14

- 104. Patent Application/Serial No.:** 12/030,862
- Title:** CHECKING FOR A MEMORY ORDERING VIOLATION AFTER A SPECULATIVE CACHE WRITE
- Filed:** 02/13/2008
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 020957/0434
- Reference No:** 33227/282010; SUN080742-US-CIP-11
- 
- 105. Patent Application/Serial No.:** 12/030,859
- Title:** ROLLING BACK A SPECULATIVE UPDATE OF A NON-MODIFIABLE CACHE LINE
- Filed:** 02/13/2008
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 020957/0434
- Reference No:** 33227/282009; SUN080742-US-CIP-12
- 
- 106. Patent Application/Serial No.:** 12/030,858
- Title:** CACHE ROLLBACK ACCELERATION VIA A BANK BASED VERSIONING CACHE CIRCUIT
- Filed:** 02/13/2008
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 020957/0434
- Reference No:** 33227/282008; SUN080742-US-CIP-16

107.      **Patent Application/Serial No.:** 11/941,895
- Title:** METHOD AND SYSTEM FOR  
                 PROMOTING TRACES IN AN  
                 INSTRUCTION PROCESSING  
                 CIRCUIT
- Filed:** 11/16/2007
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 020957/0434
- Reference No:** 33227/271003; SUN080652-US-DIV-1
- 
108.      **Patent Application/Serial No.:** 11/941,883
- Title:** METHOD AND SYSTEM FOR  
                 PROMOTING TRACES IN AN  
                 INSTRUCTION PROCESSING  
                 CIRCUIT
- Filed:** 11/16/2007
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 020957/0434
- Reference No:** 33227/271002; SUN080652-US-CIP-4
- 
109.      **Patent Application/Serial No.:** 11/880,875
- Title:** INSTRUCTION CACHE, DECODER  
                 CIRCUIT, BASIC BLOCK CACHE  
                 CIRCUIT AND MULTI-BLOCK  
                 CACHE CIRCUIT
- Filed:** 07/23/2007
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 020957/0434
- Reference No:** 33227/285008; SUN080751-US-CIP-1

110.       **Patent Application/Serial No.:** 11/880,864
- Title:** FRONT END PROCESSOR CORE  
                                  SUPPORTING MULTIPLE BACK  
                                  END EXECUTION UNITS  
                                  SHARING A BASIC BLOCK  
                                  BUILDER
- Filed:** 07/23/2007
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 020957/0434
- Reference No:** 33227/285007; SUN080749-US-CIP-1
- 
111.       **Patent Application/Serial No.:** 11/933,267
- Title:** VIRTUAL CORE MANAGEMENT
- Filed:** 10/31/2007
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 020957/0434
- Reference No:** 33227/259005; SUN080835-US-DIV-2
- 
112.       **Patent Application/Serial No.:** 11/933,297
- Title:** VIRTUAL CORE MANAGEMENT
- Filed:** 10/31/2007
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 020957/0434
- Reference No:** 33227/259006; SUN080835-US-DIV-3

113.      **Patent Application/Serial No.:** 11/933,319  
                 **Title:** VIRTUAL CORE MANAGEMENT  
                 **Filed:** 10/31/2007  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 020957/0434  
                 **Reference No:** 33227/259007; SUN080835-US-DIV-4
114.      **Patent Application/Serial No.:** 11/933,333  
                 **Title:** VIRTUAL CORE MANAGEMENT  
                 **Filed:** 10/31/2007  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 020957/0434  
                 **Reference No:** 33227/259008; SUN080835-US-DIV-5
115.      **Patent Application/Serial No.:** 11/933,349  
                 **Title:** VIRTUAL CORE MANAGEMENT  
                 **Filed:** 10/31/2007  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 020957/0434  
                 **Reference No:** 33227/259009; SUN080835-US-DIV-6



116.      **Patent Application/Serial No.:** 11/933,199  
                 **Title:** VIRTUAL CORE MANAGEMENT  
                 **Filed:** 10/31/2007  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 020957/0434  
                 **Reference No:** 33227/259004; SUN080835-US-DIV-1
117.      **Patent Application/Serial No.:** 11/932,555  
                 **Title:** MEMORY DEVICE WITH SPLIT  
                                 POWER SWITCH  
                 **Filed:** 10/31/2007  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 021171/0578  
                 **Reference No:** 33227/349002; SUN080719-US-NP
118.      **Patent Application/Serial No.:** 60/888,006  
                 **Title:** SPLIT POWER SWITCH FOR  
                                 MEMORY CELLS  
                 **Filed:** 02/02/2007  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 021731/0700  
                 **Reference No:** 33227/349001; SUN080719-US-PSP

119.      **Patent Application/Serial No.:** 11/932,643  
                 **Title:** METHOD OF SELECTIVELY  
                                 POWERING MEMORY DEVICE  
                 **Filed:** 10/31/2007  
                 **Applicant:** Sun Microsystems, Inc.  
         **Reel/Frame No.:** 021171/0578  
                 **Reference No:** 33227/349003; SUN080719-US-NP-1
120.      **Patent Application/Serial No.:** 11/932,967  
                 **Title:** ELECTRIC POWER FOR READ  
                                 AND WRITE MARGINS  
                 **Filed:** 10/31/2007  
                 **Applicant:** Sun Microsystems, Inc.  
         **Reel/Frame No.:** 021171/0578  
                 **Reference No:** 33227/349004; SUN080721-US-NP
121.      **Patent Application/Serial No.:** 11/938,196  
                 **Title:** ELECTRIC POWER FOR READ  
                                 MARGINS  
                 **Filed:** 11/09/2007  
                 **Applicant:** Sun Microsystems, Inc.  
         **Reel/Frame No.:** 021171/0578  
                 **Reference No:** 33227/349005; SUN080721-US-CNT-1



- |      |  |   |
|------|--|---|
| 125. | <b>Patent Application/Serial No.:</b> 60/731,784     | <b>Title:</b> EXTEND CACHE OPERATIONS TO PROVIDE CONTROL OVER WHICH LEVELS OF THE HIERARCHY THEY APPLY TO |
|      | <b>Filed:</b> 10/31/2005                             |   |
|      | <b>Applicant:</b> Sun Microsystems, Inc.             |   |
|      | <b>Reference No:</b> 33227/304001; SUN080666-US-PSP  |   |
| 126. | <b>Patent Application/Serial No.:</b> 11/543,549     | <b>Title:</b> CACHE INSTRUCTIONS WITH HIERARCHY CONTROL   |
|      | <b>Filed:</b> 10/04/2006                             |   |
|      | <b>Applicant:</b> Sun Microsystems, Inc.             |   |
|      | <b>Reel/Frame No.:</b> 020957/0434                   |   |
|      | <b>Reference No:</b> 33227/304002; SUN080666-US-NP-2 |   |
| 127. | <b>Patent Application/Serial No.:</b> 11/543,598     | <b>Title:</b> CACHE OPERATIONS WITH HIERARCHY CONTROL   |
|      | <b>Filed:</b> 10/04/2006                             |   |
|      | <b>Applicant:</b> Sun Microsystems, Inc.             |   |
|      | <b>Reel/Frame No.:</b> 020957/0434                   |   |
|      | <b>Reference No:</b> 33227/304003; SUN080666-US-NP-1 |   |
| 128. | <b>Patent Application/Serial No.:</b> 11/737,103     | <b>Title:</b> NAND/NOR REGISTERS  |
|      | <b>Filed:</b> 04/18/2007                             |   |
|      | <b>Applicant:</b> Sun Microsystems, Inc.             |   |
|      | <b>Reel/Frame No.:</b> 020957/0434                   |   |
|      | <b>Reference No:</b> 33227/305001; SUN080820-UP-US   |   |

129.      **Patent Application/Serial No.:** 60/729,558  
                 **Title:** TIMED PAUSE INSTRUCTION  
   FOR MORE POWER EFFICIENT  
   HANDLING OF MICRODELAYS IN  
   SOFTWARE  
                 **Filed:** 10/24/2005  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reference No:** 33227/310001; SUN080659-US-PSP
130.      **Patent Application/Serial No.:** 11/552,329  
                 **Title:** TIMED PAUSE INSTRUCTIONS  
                 **Filed:** 10/24/2006  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 020975/0434  
                 **Reference No:** 33227/310002; SUN080659-US-NP
131.      **Patent Application/Serial No.:** 11/616,093  
                 **Title:** TIMED PAUSE INSTRUCTION SET  
                 **Filed:** 12/26/2006  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 020975/0434  
                 **Reference No:** 33227/310003; SUN080659-US-CNT-1

132.      **Patent Application/Serial No.:** 11/759,218  
                 **Title:** ASSOCIATE STRUCTURE RANK  
                                 COUNTERS  
                 **Filed:** 6/6/2007  
                 **Applicant:** Sun Microsystems, Inc.  
         **Reel/Frame No.:** 017518/0150  
                 **Reference No:** 33227/279007; SUN080686-US-NP-3
133.      **Patent Application/Serial No.:** 11/880,882  
                 **Title:** TRACE UNIT  
                 **Filed:** 7/23/2007  
                 **Applicant:** Sun Microsystems, Inc.  
         **Reel/Frame No.:** 020378/0239  
                 **Reference No:** 33227/283012; SUN080754-US-CIP-1
134.      **Patent Application/Serial No.:** 11/880,877  
                 **Title:** TRACE VERIFICATION SYSTEM  
                                 AND METHOD FOR AN  
                                 INSTRUCTION PROCESSING  
                                 CIRCUIT  
                 **Filed:** 7/23/2007  
                 **Applicant:** Sun Microsystems, Inc.  
         **Reel/Frame No.:** 020378/0239  
                 **Reference No:** 33227/283016

135.      **Patent Application/Serial No.:** 11/591,024
- Title:** MAINTAINING MEMORY  
   COHERENCY WITH A TRACE  
   CACHE
- Filed:** 10/31/2006
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 020957/0434
- Reference No:** 33227/284002; SUN080667-US-NP
- 
136.      **Patent Application/Serial No.:** 11/561,270
- Title:** FUSING OPERATIONS OF A  
   TARGET ARCHITECTURE  
   OPERATION SET
- Filed:** 11/17/2006
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 018887/0263
- Reference No:** 33227/353001; SUN080680-US-NP-1
- 
137.      **Patent Application/Serial No.:** 11/561,274
- Title:** TRACE OPTIMIZATION VIA  
   FUSING OPERATIONS OF  
   TARGET ARCHITECTURE  
   OPERATION SET
- Filed:** 11/17/2006
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 018887/0263
- Reference No:** 33227/354001; SUN080680-US-NP-2

138.       **Patent Application/Serial No.:** 11/561,284
- Title:** FUSING ASSERT OPERATIONS OF  
                                  A TARGET ARCHITECTURE  
                                  OPERATION SET
- Filed:** 11/17/2006
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 018887/0263
- Reference No:** 33227/355001; SUN080680-US-NP-4
- 
139.       **Patent Application/Serial No.:** 11/759,217
- Title:** PHYSICAL MEMORY  
                                  ALLOCATING ACCORDING TO  
                                  RANKS
- Filed:** 6/6/2007
- Applicant:** Sun Microsystems, Inc.
- Reference No:** 33227/327001; SUN080686-US-NP-2



140.       **Patent Application/Serial No.:** 11/759,216  
                    **Title:** SOFTWARE DIRECTED RANK  
                                    COALESCING  
                    **Filed:** 6/6/2007  
                    **Applicant:** Sun Microsystems, Inc.  
            **Reel/Frame No.:** 020669/0050  
            **Reference No:** 33227/328001; SUN080686-US-NP-1
141.       **Patent Application/Serial No.:** 09/680,672  
                    **Patent No.:** 6,502,202  
                    **Title:** SELF-ADJUSTING MULTI-SPEED  
                                    PIPELINE  
                    **Filed:** 10/6/2000  
                    **Applicant:** Sun Microsystems, Inc.  
            **Reel/Frame No.:** 011192/0610  
            **Reference No:** 33227/329001; SUN080800-US-NP
142.       **Patent Application/Serial No.:** 09/661,137  
                    **Title:** REPAIRABLE DYNAMIC  
                                    PROGRAMMABLE LOGIC ARRAY  
                    **Filed:** 9/13/2000  
                    **Applicant:** Sun Microsystems, Inc.  
            **Reel/Frame No.:** 011222/0881  
            **Reference No:** 33227/330001; SUN080799-US-NP

- |      |   |
|------|---|
| 143. | <b>Patent Application/Serial No.:</b> 09/640,486  |
|      | <b>Title:</b> CONFIGURABLE DYNAMIC PROGRAMMABLE LOGIC ARRAY                                 |
|      | <b>Filed:</b> 8/16/2000   |
|      | <b>Applicant:</b> Sun Microsystems, Inc.  |
|      | <b>Reel/Frame No.:</b> 011150/0664  |
|      | <b>Reference No:</b> 33227/331001; SUN080798-US-NP  |
| 144. | <b>Patent Application/Serial No.:</b> 10/071,966  |
|      | <b>Patent No.:</b> 6,614,258  |
|      | <b>Title:</b> FIELD-PROGRAMMABLE DYNAMIC LOGIC ARRAY  |
|      | <b>Filed:</b> 2/5/2002  |
|      | <b>Applicant:</b> Sun Microsystems, Inc.  |
|      | <b>Reel/Frame No.:</b> 012596/0994  |
|      | <b>Reference No:</b> 33227/332001; SUN080797-US-CIP   |
| 145. | <b>Patent Application/Serial No.:</b> 09/609,490  |
|      | <b>Patent No.:</b> 6,348,812  |
|      | <b>Title:</b> DYNAMIC PROGRAMMABLE LOGIC ARRAY THAT CAN BE REPROGRAMMED AND A METHOD OF USE |
|      | <b>Filed:</b> 7/5/2000  |
|      | <b>Applicant:</b> Sun Microsystems, Inc.  |
|      | <b>Reel/Frame No.:</b> 010915/0302  |
|      | <b>Reference No:</b> 33227/333001; SUN080796-US-NP  |

146. **Patent Application/Serial No.:** 10/054,471  
**Patent No.:** 6,894,534  
**Title:** DYNAMIC PRGOFRAMMABLE  
LOGIC ARRAY THAT CAN BE  
REPROGRAMMED AND A  
METHOD OF USE  
**Filed:** 1/18/2002  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 012552/0065  
**Reference No:** 33227/334001; SUN080795-US-CIP

147. **Patent Application/Serial No.:** ~~09/566,901~~  
**Patent No.:** 6,542,958  
**Title:** SOFTWARE CONTROL OF  
DRAM REFRESH TO REDUCE  
POWER CONSUMPTION IN A  
DATA PROCESSING SYSTEM  
**Filed:** 5/10/2000  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 010789/0532  
**Reference No:** 33227/335001; SUN080794-US-NP

148. **Patent Application/Serial No.:** 11/932,311  
**Title:** DYNAMIC VOLTAGE SCALING  
FOR SELF-TIMED OR RACING  
PATHS  
**Filed:** 10/31/2007  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 020957/0434  
**Reference No:** 33227/336001; SUN080757-US-NP

- 149. Patent Application/Serial No.:** 11/435,528  
**Title:** SYSTEM AND METHOD FOR PROCESSING INSTRUCTIONS IN A COMPUTER SYSTEM  
**Filed:** 5/17/2006  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 017910/0029  
**Reference No:** 33227/337001; SUN080756-US-NP
- 150. Patent Application/Serial No.:** 11/408,784  
**Title:** REDUCING POWER CONSUMPTION FOR PROCESSING OF COMMON VALUES IN MICROPROCESSOR REGISTERS AND EXECUTION UNITS  
**Filed:** 4/21/2006  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 017801/0323  
**Reference No:** 33227/338001; SUN080755-US-NP
- 151. Patent Application/Serial No.:** 10/045,127  
**Patent No.:** 6,848,025  
**Title:** METHOD AND SYSTEM FOR PROGRAMMABLE REPLACEMENT MECHANISM FOR CACHING DEVICES  
**Filed:** 10/26/2001  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 012501/0661 (Inventors to Elan)  
017089/0214 (Elan to Montalvo)  
021731/0700 (Montalvo to Sun)  
**Reference No:** 33227/339001; SUN080802-US-NP

152.      **Patent Application/Serial No.:** 10/004,338  
                 **Patent No.:** 6,957,323  
                 **Title:** OPERAND FILE USING  
                                 POINTERS AND REFERENCES  
                                 COUNTERS AND A METHOD OF  
                                 USE  
                 **Filed:** 11/14/2001  
                 **Applicant:** Sun Microsystems, Inc.  
         **Reel/Frame No.:** 012356/0083 (Inventors to Elan)  
                                 017089/0214 (Elan to Montalvo)  
                                 021731/0700 (Montalvo to Sun)  
         **Reference No:** 33227/340001; SUN080801-US-NP
153.      **Patent Application/Serial No.:** 11/738,287  
                 **Title:** DYNAMIC DUAL OUTPUT  
                                 LATCH  
                 **Filed:** 4/20/2007  
                 **Applicant:** Sun Microsystems, Inc.  
         **Reel/Frame No.:** 020957/0434  
         **Reference No:** 33227/341001; SUN080821-US-NP
154.      **Patent Application/Serial No.:** 11/490,778  
                 **Title:** MECHANISM TO PROVIDE  
                                 SOFTWARE ACCESS TO  
                                 PHYSICAL MEMORY IN A  
                                 PROCESSING SYSTEM  
                 **Filed:** 7/21/2006  
                 **Applicant:** Sun Microsystems, Inc.  
         **Reel/Frame No.:** 020421/0790  
         **Reference No:** 33227/342001; SUN080833-US-NP

155.       **Patent Application/Serial No.:** 11/963,603  
                  **Title:** MICROPROCESSOR INCLUDING  
                                  A DISPLAY INTERFACE IN THE  
                                  MICROPROCESSOR  
                  **Filed:** 12/21/2007  
                  **Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 020957/0434  
**Reference No:** 33227/343001; SUN080827-US-NP
156.       **Patent Application/Serial No.:** 11/963,579  
                  **Title:** MICROPROCESSOR INCLUDING  
                                  A DISPLAY INTERFACE IN THE  
                                  MICROPROCESSOR  
                  **Filed:** 12/21/2007  
                  **Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 020957/0434  
**Reference No:** 33227/344001; SUN080826-US-NP
157.       **Patent Application/Serial No.:** 11/745,370  
                  **Title:** ENHANCED SIGNALING  
                                  SENSITIVITY USING  
                                  MULTIPLE REFERENCES  
                  **Filed:** 5/7/2007  
                  **Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 020957/0434  
**Reference No:** 33227/345001; SUN080834-US-NP

158.       **Patent Application/Serial No.:** 11/416,872  
                    **Title:** SYSTEM AND METHOD FOR  
                                    OPTIMIZING A MEMORY  
                                    CONTROLLER  
                    **Filed:** 5/2/2006  
                    **Applicant:** Sun Microsystems, Inc.  
            **Reel/Frame No.:** 017865/0651  
            **Reference No:** 33227/346001; SUN080831-US-NP
159.       **Patent Application/Serial No.:** 11/450,103  
                    **Title:** SYSTEM AND MEHTOD FOR  
                                    CONSERVING POWER  
                    **Filed:** 6/9/2006  
                    **Applicant:** Sun Microsystems, Inc.  
            **Reel/Frame No.:** 17988/0735  
            **Reference No:** 33227/347001; SUN080832-US-NP
160.       **Patent Application/Serial No.:** 60/721,817  
                    **Title:** SOFTWARE HINT TO SPECIFY  
                                    PREFERRED LOAD VALUE  
                                    PREDICTION MECHANISM  
                    **Filed:** 9/29/2005  
                    **Applicant:** Sun Microsystems, Inc.  
            **Reference No:** 33227/351001; SUN080657-US-PSP

161.      **Patent Application/Serial No.:** 11/351,059  
                 **Title:** SOFTWARE HINT TO SPECIFY  
                                 PREFERRED LOAD VALUE  
                                 PREDICTION MECHANISM  
                 **Filed:** 2/9/2006  
                 **Applicant:** Sun Microsystems, Inc.  
         **Reel/Frame No.:** 017518/0142  
         **Reference No:** 33227/351003; SUN080657-US-NP
162.      **Patent Application/Serial No.:** 60/762,817  
                 **Title:** SOFTWARE HINT OT SPECIFY  
                                 PREFERRED LOAD VALUE  
                                 PREDICTION MECHANISM  
                 **Filed:** 1/27/2006  
                 **Applicant:** Sun Microsystems, Inc.  
         **Reference No:** 33227/351002; SUN080658-US-PSP
163.      **Patent Application/Serial No.:** 60/806,786  
                 **Title:** EXECUTION MODES APPLIED  
                                 TO INSTRUCTION SEQUENCES  
                 **Filed:** 7/9/2006  
                 **Applicant:** Sun Microsystems, Inc.  
         **Reference No:** 33227/352001; SUN080687-US-PSP



164.      **Patent Application/Serial No.:** 11/774,581
- Title:** EXECUTING INSTRUCTION SEQUENCES ACCORDING TO EXECUTION MODE
- Filed:** 7/7/2007
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 020750/0401
- Reference No:** 33227/352002; SUN080687-US-NP-1
- 
165.      **Patent Application/Serial No.:** 11/774,583
- Title:** CONTROLLING OPERATION OF A PROCESSOR ACCORDING TO EXECUTION MODE OF AN INSTRUCTION SEQUENCE
- Filed:** 7/7/2007
- Applicant:** Sun Microsystems, Inc.
- Reel/Frame No.:** 020750/0401
- Reference No:** 33227/352003; SUN080687-US-NP-2
- 
166.      **Patent Application/Serial No.:** 11/880,860
- Title:** MICROPROCESSOR WITH COHERENT CACHES FOR BASIC BLOCKS AND TRACES
- Filed:** 7/23/2007
- Applicant:** Sun Microsystems, Inc.
- Reference No:** 33227/356001

- 167.      Patent Application/Serial No.:** 11/781,942
- Title:** A TRACE UNIT WITH A  
DECODER, A BASIC-BLOCK  
CACHE, A MULTI-BLOCK  
CACHE, AND SEQUENCER
- Filed:** 7/23/2007
- Applicant:** Sun Microsystems, Inc.
- Reference No:** 33227/001001;SUN080745-US-CIP1
- 
- 168.      Patent Application/Serial No.:** 12/030,856
- Title:** DELAYED STORE BUFFER  
ENTRIES TAGGED WITH TRACE  
IDS
- Filed:** 2/13/2008
- Applicant:** Sun Microsystems, Inc.
- Reference No:** SUN080742-US-CIP15